22. (New). An audio receiver comprising:

a jitter buffer; and

means for monitoring activity on a network and determining at least a plurality of burst periods from said activity; and

means for adjusting said jitter buffer to a size in accordance with said monitoring of said activity on said network for said at least a plurality of burst periods.

23. (New). The audio receiver of claim 22, wherein said network activity monitoring means and adjusting means includes a controller programmed to monitor activity on said network for burst periods and to adjust said jitter buffer size based on said monitoring of said activity on said network.

A version of the above amendments with markings showing the changes immediately follows the signature block of this paper.

REMARKS

Reconsideration in view of the foregoing amendments and the following remarks, is respectfully requested.

I. Interview Summary

Initially, the applicants thank Examiner Phongchau Ba Nguyen and her Supervisor, Examiner Chau T. Nguyen, for granting and attending the in- person interview with the applicants' representatives, Jerome R. Smith, Jr. and David Galinsky, at the U.S. Patent and Trademark Office on October 10, 2001.

In the Interview, claims 1 and 7 were discussed, as well as U.S. Patents No. 5,127,001 to Steagall, et al. (Steagall) and No. 5,323,272 to Klingler (Klingler). Amendments were proposed for claim 1, as well as arguments distinguishing the invention, from Steagall and Klingler, Claim 7 was to be amended to have portions corresponding to those amended in claim 1. However, applicants note that claim 7 has been allowed, as well as claims 3, 6 and 8, as stated in the Final Office Action, and noted by the Examiners. Accordingly, claim 7 has been amended above (and below in the marked- up version) for clarity, with independent claims 9 and 13 amended so as to be consistent with claim 1.

Agreement was not reached as to the allowability of claims 1, 2, 4, 5 and 9- 14. However, the rejections of claims 1, 2, 4, 5 and 9- 14 as anticipated under 35 USC 102(b) by Steagall, and of claims 1, 2, 4, 5, 9, 10, 13 and 14 as anticipated under 35 USC 102(b) by

Klingler, both from the Final Office Action of February 16, 2001 (the Final Office Action), were withdrawn in view of the language in the proposed claims and the arguments presented.

Finally, burst and burst periods were noted as supported in the specification, and the recitation of "a likelihood" was acceptable to the Examiners. Accordingly, the rejection of claim 1 under 35 USC 112, second paragraph (from the Final Office Action), was withdrawn.

II. Remarks

Independent claims 1, 9 and 13 have been amended in accordance with the discussion at the Interview of October 10, 2001. These claims have been amended so as to more accurately recite the invention.

New claims 15-23 are also presented below. Claim 15 is proposed claim 1, presented at the above summarized Interview, while claims 18 and 22, are drafted similarly.

The allowability of claims 3 and 6-8 is noted, and in view of the arguments below, it is respectfully asserted that these claims are now proper under 35 USC 112, second paragraph.

Claims 3, 4, 6, 7 and 9, were rejected under 35 USC 112, second paragraph for various reasons, detailed below.

With respect to claims 3 and 7, the recitation of "two statistics" has been removed from these claims. Accordingly, this rejection has been rendered moot for claims 3 and 7, whereby it is respectfully asserted that this rejection for these claims should be withdrawn.

Claims 4 and 9 have been amended so as to have proper antecedents. Accordingly, it is respectfully asserted that these rejections be withdrawn.

With respect to claim 6, it is respectfully asserted the recited statistical analysis is detailed in the Specification at page 11, line 12 to page 12, line 3. Accordingly, this recitation is properly supported, whereby claim 6 is proper under 35 USC 112, second paragraph.

Based on the above, it is respectfully asserted that claims 3, 4, 6, 7 and 9 are proper under 35 USC 112, second paragraph.

Claims 1, 2, 4, 5, 9-11, 13 and 14, were rejected under 35 USC 102(e), as anticipated by Katseff, et al. (U.S. Patent No. 6,301,258) (Katseff).

Claim 1 has been amended to recite the determination of at least one burst period from network activity. Upon determination of activity amounting to at least one burst period, the at least one burst period is analyzed to determine the likelihood of a subsequent burst period, with jitter buffer size adjusted based on the determined likelihood of the subsequent burst period. As a result of this method, jitter buffer size is adjusted proactively, based on

the likelihood of burst periods. Claims 9 and 13, di rected to an audio receiver, have been amended similarly.

Katseff is directed to a method for handling jitter by looking at two time intervals and reactively adjusting a telephony input buffer based on detected jitter between these time intervals. This reference is silent as to burst detection, as it does not look for bursts, but rather analyzes all changes in the network in terms of jitter between measured intervals.

Based on the above, this reference operates in a completely different manner than the claimed subject matter. Moreover, it fails to show any structure or methods for burst period detection, and utilization of burst period information for queue adjustment. Accordingly, claims 1, 9 and 13 are neither anticipated nor rendered obvious by Katseff.

Since claims 1, 9 and 13 are neither anticipated under 35 USC 102(b) by Katseff, or rendered obvious, claims 2, 4, 5, 10, 11 and 14, respectively dependent thereon, are also allowable for the same reasons. These claims further distinguish the invent ion over Katseff.

Claim 12 was rejected under 35 USC 103(b) as obvious based on Katseff in view of Shimada (U.S. Patent No. 3,914,790).

Claim 12 is dependent on claim 9, that has been discussed above. That discussion is applicable here.

Katseff has been discussed above. That discussion is applicable here.

Shimada has been cited to disclose an amplifier in communication with a decompressor. However, Shimada is directed to stereo equipment and has nothing to do with communication networks.

Accordingly, Shimada fails to cure the deficiencies associated with Katseff, and thus, its disclosure of an amplifier and decompressor can not render claim 9 obvious under 35 USC 103(a).

Since claim 9 is non-obvious under 35 USC 103(a) in view of Katseff and Shimada, either alone or in combination, claim 12, dependent thereon, is also non- obvious under 35 USC 103(a) for the same reasons. This claim further distinguishes the invention over this cited art.

Claims 15-23 have been added and have been discussed above. It is respectfully asserted that in view of the above summarized Interview, these claims are neither anticipated or obvious over Steagall and Klingler. Moreover, in view of the arguments presented above, it is respectfully asserted that these claims are neither anticipated or obvious over Katseff and Shimada. These claims round out the scope of the invention.

Finally, the applicants note the Examiner's citation of R. Ramjee, et al., Adaptive Playout Mechanisms for Packetized Audio Applications in Wide- Area Networks, in IEEE Infocom, June 1994, pages 680- 688 (Ramjee), to complete the record.

Should the Examiner have any question or comment as to the form content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Entry of this paper and allowance of all pending claims, 1-14, is respectfully requested.

Respectfully submitted,

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By their Attorneys,
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MARKED UP VERSION TO SHOW CHANGES MADE

Claims 1-5, 7, 9, and 12-14 have been amended as below, with underlines (__) indicating additions and brackets ([ ]) indicating deletions.

1. (Twice Amended). A method for controlling jitter buffer size for a jitter buffer of a communication device for communication with a network, the method comprising the steps of:

monitoring [said] network activity [for] and determining at least one burst period from said network activity;

analyzing said at least one burst period and determining a likelihood for at least one subsequent burst period therefrom; and

adjusting said jitter buffer size based on said determ ined likelihood for said at least one subsequent burst period.

2. (Once Amended). The method of claim 1, wherein said step of adjusting said jitter buffer size is in accordance with the detection of said at least one additional subsequent burst period.

3. (Once Amended). The method of claim 1, wherein said step of monitoring said network activity includes:

measuring a time to play for each packet received at a predetermined location;

building a time to play statistic [by creating at least two statistics from] for each of said received packets from at least two predetermined time intervals;

calculating the width and offset values from [each of] said respective [at least two] time to play statistics; and

determining said likelihood of said at least one subsequent burst period from said [widths and offsets] width and offset values of said respective time to play [statistic] statistics.

4. (Once Amended). The method of claim 2, wherein said step of adjusting said jitter buffer size includes, [estimating] making an estimate of said jitter buffer size and adjusting said jitter buffer size in accordance with said estimate.

5. (Once Amended). The method of claim 1, wherein said step of monitoring said network activity for said at least one burst period includes monitoring said network activity for one burst period.

7. (Once Amended). A method for controlling jitter buffer size for a jitter buffer of a communication device for communication with a network, the method comprising the steps of:

monitoring data packet transmissions [in said] from network activity, including monitoring said data packet transmissions to detect at least one burst period;

building a time to play statistic [by creating at least two statistics from] for each of said received packets from at least two predetermined time intervals;

calculating the width and offset values from [each of] said respective [at least two] time to play statistics;

determining the likelihood of at least one subsequent burst period from said width and offset values of said respective time to play [statistic] statistics, provided there has been said at least one burst period; and

[estimating] making an estimate of said jitter buffer size to accommodate data packet transmissions of said at least one subsequent burst period based on said time to play [statistic] statistics provided there has been said at least one burst period.

9. (Once Amended). An audio receiver comprising:

a jitter buffer; and

a controller for said jitter buffer, said controller programmed to:

monitor [said] network [for] activity and determine at least one burst period from said network activity; and

[to] adjust said jitter buffer size based on said monitoring said network activity for said at least one burst period.

12. (Once Amended). The audio receiver of claim [9] 11, additionally comprising an amplifier in communication with said decompressor.

13. (Once Amended). An audio receiver comprising:

a jitter buffer; and

means for monitoring [a] network [for] activity and determining at least one burst period from said network activity; and

means for adjusting said jitter buffer to a size in accordance with said monitoring of said network activity for said at least one bur st period.

14. (Once Amended). The audio receiver of claim 13, wherein said network activity monitoring means and adjusting means includes [,] a controller programmed to monitor activity on said network for at least one burst period and to adjust said jitter buffer size based on said monitoring of said activity on said network [for said at least one burst period].